

# 2007 Highways and Engineering Conference

February 6-8, 2007  
Schedule of Events



**NOTE:**

**MDT ONLY**- means only MDT/FHWA persons may attend session- this includes Tuesday the general session

**All participants**- means the session is geared toward both preconstruction/design and construction/field issues

**Preconstruction/design participants**- means the session is geared more towards preconstruction/design issues

Check out the SiteManager Demonstrations in Bitterroot River Room A

- Tuesday, February 6th 1:00-5:00 pm
- Wednesday & Thursday, February 7-8th all day

# 2007 Highways and Engineering Conference

## Schedule of Events



### Monday February 5, 2007

2:30-4:30 pm Early registration/check-in

Missoula Conference Center  
Rotunda

### Tuesday February 6, 2007

**MDT/FHWA ONLY**

8:00 am -4:00 pm Registration/check-in and information

Missoula Conference Center  
Rotunda

9:00-10:15 am Opening Comments and Welcome

**MDT/FHWA ONLY**

**10:15 - 10:30**

**BREAK**

10:30-11:30 Legal Issues and E-mail Procedures

Steve Garrison

11:30-12:00 pm Interstate 50th Year Presentation

Lloyd Rue

FHWA

**12:00 - 1:00 Lunch with Keynote Speaker**

Henry Shovic

Safe Living, Inc.

1:00-1:50 Code of Conduct

Steve Garrison

2:00-2:50 Work Zone Safety and Mobility- New Considerations

Lloyd Rue  
Mark Baum  
Lesly Tribelhorn

FHWA

**2:50 - 3:15**

**BREAK**

3:15-4:40 or  
5:00

District Meetings

D1- Parlor A  
D2- Parlor B  
D3- Parlor C  
D4- Parlor F  
D5- Parlor E

**Montanan's Comprehensive Safety Plan Overview-** an informational presentation on the recently developed Montana Comprehensive Highway Safety Plan. This plan is a requirement of SAFETEA LU to allow for funding flexibility that must be data driven and comprehensive. The plan is a cooperative effort of multiple agencies and safety stakeholders to reduce the number and severity of crashes in the state.

Duane Williams Parlor D  
Carol Strizich

**Research Program Overview-**explain all programs in Research; research projects, experimental projects, the library program and technology transfer.

Craig Abernathy Parlor G

1:00 -5:00

SiteManager Demos

Bitterroot River  
Room A

# 2007 Highways and Engineering Conference

## Schedule of Events



**Wednesday February 7, 2007**

8:00 am -4:00 pm	Registration/check-in and information		Missoula Conference Center Rotunda
8:00-8:50 am	<b>A Kick in the Ash: Archaeological Excavation of Site 24PW308-</b> learn about this site in Powell County.	Steve Platt	Parlor B
	All participants		
	<b>Guardrail Basics for Construction and Design-</b> review all types of guardrail (cable, w-beam, concrete barrier, and box beam) used in Montana. Also review terminal end sections and bridge approach sections. Review proper selection of guardrail for use in the field.	Scott Keller	Parlor F
	All participants		
8:00- 9:50	<b>Weeksville West Blasting and Rock Bolting-</b> overview of the Weeksville West project and the blasting involved.	Larry Prinki John Benda	Parlor A
	Construction participants		
<b>MDT ONLY</b>	<b>Bridge Construction Inspection-</b> inspection of all phases of bridge construction.	Fred Beal Mark Kurokawa	Parlor C
	Construction participants		
<b>MDT ONLY</b>	<b>Survey Issues Roundtable-</b> presentation on the Merits of Robotic Total Stations vs. RTK. A question & answer session on any survey related issue.	Dave Davis Ralph Jones John Hoechst Rob Mihalovich Mark Iwaniak Mark Roedel Mick Brown	Parlor D
	All participants		
	<b>Federal Aid 101-</b> FHWA overview, Federal-Aid ineligible items, FHWA full oversight vs. non-full oversight.	Bob Seliskar Gene Kaufman Jeff Patten	FHWA FHWA FHWA Parlor E
	All participants		
	<b>Specifying Concrete for High Performance-</b> this presentation proposes the use of performance-based specifications for concrete construction as an alternative to traditional prescriptive specifications. It demonstrates how performance-based specifications encourage innovation, cost effective construction, and quality control. An introduction to High Performance Concrete (HPC) including state-of-the-art products such as self-consolidating concrete, high strength concrete, and high-early strength concrete is presented. A sample performance-based specification is introduced.	Lionel Lemay	National Ready Mixed Concrete Association Parlor G
	Preconstruction/design participants		

## Wednesday February 7, 2007

8:00-9:50 am	<b>Trns*Port Orientation-</b> an overview of the Trns*port modules and how they work together as well as a high-level overview of SiteManager (both Construction and Materials).	Lori Stanich		Bitterroot River Rms B & C
	Construction participants			
9:00-9:50	<b>Impacts of ROW Fencing on Wildlife Movement</b>	Larry Sickerson Pat Basting Deb Wambach		Parlor B
<b>MDT ONLY</b>	All participants			
	<b>MDT Engineering Applications: Tools that Help the Design Become the Road-</b> items covered will include: features, hints and tricks for using the MDT Engineering Applications, current/planned enhancements, and solicitation of input for potential future enhancements.	Tim Boucher Riley Phelps		Missoula District Const. Conference Room
	Construction participants			
9:00- 11:50 (3 hr. class)	<b>Guardrail Design-</b> review basic design philosophy for all types of guardrail (cable, w-beam, concrete barrier, and box beam) used in Montana, including terminal end sections and bridge approach sections. Review basic design parameters (clear zones, rail deflection upon impact, snow drifting, costs, etc.) and proper selection of guardrail for use in the field. Review the importance of the widening behind the guardrail posts and what to do if the widening is not obtainable. Explain the use of special guardrail design items such as anchored concrete barrier rail, stiffened rail sections, impact attenuators, and bridge approach sections.	Scott Keller		Parlor F
	Preconstruction participants			
<b>9:50 - 10:00</b>	<b>BREAK</b>	<b>BREAK</b>		
10:00-10:50	<b>Work Zone Traffic Control: Lessons Learned in 2006-</b> a summary of the statewide review of traffic control on MDT projects in 2006.	Lloyd Rue Mark Baum	FHWA	Parlor B
	Construction participants			
	<b>MicroStation Custom Programs for MDT-</b> demonstrate the MDT macros and VBA's used to create plans for all the design areas.	Bob Cummings		Parlor C
	Preconstruction participants			
10:00-11:50	<b>MSE Walls-</b> topics included in this presentation are state-of-the-practice design tools and construction practices to for mechanically stabilized earth technology for routine use of cost-effective earth retention structures.	Brian Collins		Parlor A
<b>MDT ONLY</b>	Construction participants			
	<b>Specifications: Cuss and Discuss-</b> this session will be an ongoing set of informal discussions on various specifications.	Lisa Durbin Dan Smith Stefan Streeter		Parlor D
	Construction participants			

**Wednesday February 7, 2007**

10:00-11:50	<b>Subsurface Utility Engineering (SUE): Strategic Approach for MDT Design Bid Build Projects-</b> this session will explain the SUE process and strategy for design bid build projects and the responsibility of the designer. Specific examples of projects in Utah, Montana, and Minnesota where SUE expedited the process will be covered.  <a href="#">Preconstruction participants</a>	Phillip J. Meis	Utility Mapping Services, Inc.	Parlor E
<b>MDT ONLY</b>	<b>Environmental Permitting: Preconstruction thru Construction</b>  <a href="#">All participants</a>	Bill Semmons Tom Gocksch Ray Studebaker		Parlor G
	<b>Pile Driving Inspection: Preparation Tips, Saximeter Operation, and Recording and Data Transmittal-</b> several areas will be covered including the following: inspecting plans, piles, and paperwork; inspecting templates before driving; pile driving safety; saximeter operation and recording; and a question and answer period.  <a href="#">Construction participants</a>	Tony Cerovski		Bitterroot River Rms B & C
	<b>OPX2 for New Users-</b> a hands on training session.  <a href="#">All participants</a>	John Pirre Shane Maharg		Missoula District Const. Conference Room
11:00- 11:50	<b>US 2 Havre Reconstruction Project: Construction Traffic Management-</b> this presentation will touch on new FHWA regulations on Work Zone Safety and Mobility, coordination program with local agencies and business owners, traffic phasing and management plan design, and specific construction constraints and challenges.  <a href="#">All participants</a>	John Pavsek	Morrison-Maierle, Inc.	Parlor B
<b>MDT ONLY</b>	<b>Administering Highway Construction Contracts: Environmental Concerns</b>  <a href="#">Construction participants</a>	Lyle Manley		Parlor C
<b>12:00 - 1:00 pm                      Lunch - on your own</b>				
1:00-1:50	<b>Research Program Overview-</b> explain all programs in Research; research projects, experimental projects, the library program and technology transfer.  <a href="#">All participants</a>	Craig Abernathy		Parlor C
	<b>OPX2 for Managers</b>  <a href="#">Preconstruction participants</a>	John Pirre Shane Maharg		Bitterroot River Rms B & C
1:00-5:00 (4 hr. class)	<b>Data Collector Templates-</b> a hands-on class where you will be building Road Templates with the TDS Ranger.  <b>MDT ONLY</b> <a href="#">Construction participants-</a> <i>Each Participant Should Bring A Data Collector If Possible.</i>	Jim Day Susan Foreman		Parlor A

## Wednesday February 7, 2007

1:00-2:50 <b>MDT ONLY</b>	<b>Four Elements of Right-of-Way-</b> an overview and panel discussion on design, access control, utilities, and railroad.	Greg Hahn Jim Mullins Greg Pizzini Steve Giard Bill Duede		Parlor B
	<b>SAFETEA-LU Panel Discussion-</b> panel discussion to explain and answer questions on the changes under SAFETEA-LU	Ted Burch Jean Riley Jim Skinner Duane Williams Lynn Zanto	FHWA	Parlor E
	<b>Bailey Method: A Tool to Analyze Asphalt Mix Designs</b>	Scott Barnes PJ Shea		Parlor F
	<b>Safe Living: Self Protection for Those Working with the Public-</b> the principles of Safe Living (Awareness, Confidence, Training, and Support Networks) are universal. Dr. Shovic developed them using the life-skills of people who take risks for a living: firefighters, martial artists, soldiers, law enforcement officers, and medical personnel. Each seminar is an integrated, solution-centered package, blending information-sharing, scenario-building, "hands-on" training, and participant-sharing.	Henry Shovic, PhD	Safe Living Seminars, LLC	Parlor G
	<b>MDT's New Quality Assurance Software Suite: Tools to Support the Quality Inspection Process-</b> this class will cover the process flow for using the new MDT QA Software Suite including contract file creation (selecting material items and personnel), contract file test specification creations (setting, editing, reviewing and locking material item tests and test specifications), and test data operations (test data entry, locking, and results reporting).	Tim Boucher Riley Phelps		Missoula District Const. Conference Room
Construction participants				
1:00-3:50 (3 hr. class)	<b>Earthworks and Mass Diagrams-</b> this session will give participants a better understanding of mass diagrams; a method to graphically represent the amount of material that will be cut and used for fill on any earth work job.	Clay Blackwell Damian Krings		Parlor D
All participants				
2:00-2:50	<b>The Municipal Storm Water Program: MDT's Commitments and Obligations-</b> the session will be an introduction to the new MS4 (Municipal Separate Storm Sewer System) program, how it affects the department, and what we need from everyone in order to comply.	Stacy Hill		Parlor C
Preconstruction participants				
	<b>OPX2: Tips and Tricks</b>	John Pirre Shane Maharg		Bitterroot River Rms B & C
Preconstruction participants				



**Wednesday February 7, 2007**

3:00-3:50	<b>US 93 Mud Creek Structures-</b> this session will cover vertical drain design, preloading, and construction monitoring of settlement.	Marco Fellin Rich Dombrowski	TetraTech, Inc.	Parlor C
	<i>All participants</i>	Tom Ritz	Carter Burgess	
	<b>MDT Engineering Applications: Tools that Help the Design Become the Road-</b> items covered will include: features, hints and tricks for using the MDT Engineering Applications, current/planned enhancements, and solicitation of input for potential future enhancements.	Tim Boucher Riley Phelps		Missoula District Const. Conference Room

*Construction participants*

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3:00- 5:00	<b>Permanent Erosion and Sediment Control Design Manual-</b> the presentation is for a new design manual implementing permanent erosion and sediment control measures.	Jake Goettle Dan Ham		Parlor B
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*Construction participants*

<b>MDT ONLY</b>	<b>How Subgrade Construction Requirements Relate to Surface Design-</b> this class will explain how MDT comes up with a surfacing design and how various subgrade and surfacing construction requirements relate to the design. Specifically R-Value vs. Soils Class, compaction, special borrow, and gravel cure.	Matt Strizich Bob Weber Dan Hill Bill Henning		Parlor E
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*Construction participants*

	<b>New Geopak Criteria-</b> demonstrate the new rewrite of MDT Geopak Criteria using the latest Geopak and Criteria enhancements. Use the Design and Computation Manager to place elements and manipulate cross sections.	Bob Cummings		Parlor F
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*Preconstruction participants*

	<b>Safe Living: Preventing and Mitigating Workplace Violence-</b> the principles of Safe Living (Awareness, Confidence, Training, and Support Networks) are universal. This seminar is an integrated, solution-centered package, blending information-sharing, scenario-building, "hands-on" training, and participant-sharing.	Henry Shovic, PhD	Safe Living Seminars, LLC	Parlor G
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*All participants*

<b>MDT ONLY</b>	<b>Pile Driving Inspection: Preparation Tips, Saximeter Operation, and Recording and Data Transmittal-</b> several areas will be covered including the following: inspecting plans, piles, and paperwork; inspecting templates before driving; pile driving safety; saximeter operation and recording; and a question and answer period.	Tony Cerovski		Bitterroot River Rms B & C
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*Construction participants*

Wednesday February 7, 2007

4:00-4:50	<p><b>Truss Rehab Projects in Montana- Lessons Learned-</b> HDR Engineering performed rehab design for three historic truss bridges in Montana. Two of these were constructed before 1900 and one was constructed using Italian prisoners of war as labor. Restoring these bridges offered unique challenges including maintaining the historic character of the bridges, finding existing plans, finding physical properties of old members, heat shortening, straightening and repair, reconstruction of badly deteriorated built-up steel members, special jacking methods for light member trusses without end floor-beams, bearing solutings, removal and over coating of old lead based paint, attaching AASHTO rated rail to light timber decking, concrete repair, and encasement and replacement of concrete columns.</p>	Brad Miller Dustin Hirose	HDR Engineering	Parlor D
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All participants

<p><b>Quantm Route Optimizing Software Study-</b> the Colorado Department of Transportation in cooperation with the Federal Highway Administration conducted an independent study to evaluate the usefulness of the Quantm system for planning transportation improvements. The Quantm system includes proprietary route optimization software that can be used to develop and screen highway alternatives based on a wide range of engineering design parameters and environmental data. The results of the study found that Quantm can provide substantial benefits to highway projects that have at least one of the following characteristics: 1) an opportunity to optimize cut/fill to save construction costs, or 2) an opportunity to develop new alignments that do not strictly follow an existing route. The study outlined the major data sets that are needed for successful implementation of the system and tested the results by directly importing the outputs into commonly available roadway design software.</p>	Brian Werle Brann Gregor Jim Krogman	Carter Burgess	Parlor C
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Preconstruction participants

**3:00 pm - 6:00 pm**

US 93 Wildlife ROW Fencing/Crossings Tour  
Size Limit- 45 participants



## Thursday February 8, 2007

8:00 am -3:00 pm	Registration/check-in and information	Missoula Conference Center Rotunda		
8:00-8:50 am	<b>Manintenance Panel Discussion on Post Construction Issues</b>	John Blacker Jon Swartz Doug Moeller		Parlor C
	Construction participants			
	<b>The Consultant's Role in Construction: Columbus South-</b> a case study of the Columbus – South Project and the involvement of the consultant designers in the construction process.	John Shoff Wade Irion Greg Gabel	HKM	Parlor F
	Construction participants			
	<b>US 93 Mud Creek Structures-</b> this session will cover vertical drain design, preloading, and construction monitoring of settlement.	Marco Fellin Rich Dombrowski	TetraTech, Inc.	Bitterroot River Rms B & C
	All participants	Tom Ritz	Carter Burgess	
8:00- 9:50	<b>Portland Cement Concrete Pavement (PCCP)-</b> concrete/cement topics that include a brief discussion about the history of concrete and cement, and cement chemistry (how cement works in concrete). How concrete mix designs and pavement slab design and construction practices relates to long-term durability. Discuss flat slab and PCCP problems and concerns, along with discussing joint spacing during design and construction. Other topics discussed include concrete intersections, introducing new technology and effects of salt on new concrete.	Jim Powell Jim Tobin	NW Chapter of the American Concrete Pavement Association	Parlor A
	All participants			
	<b>Cold In-place Recycling, Slurry Seals, and Microsurfacing-</b> cold in-place recycling, slurry seals, and microsurfacing are cost effective alternatives for scheduled and preventative maintenance projects. Cold in-place recycling (CIPR) is an alternative to asphalt overlay or mill and fill treatments on low-volume roads. CIPR has been used by the Maintenance Division, and will be used by the Engineering Division on a few projects next construction season. Slurry sealing is a more durable alternative to chip sealing. Micosurfacing is an alternative to plant mix seals or chip seals on high-volume roads and can also be used for rut filling. This presentation will given by experts from the industry.	Chuck Valentine  Pierre Peltier	Valentine Surfacing  SemMaterials, L.P.	Parlor B
	All participants			
	<b>Change Order and Contract Final Procedures-</b> the first part will review the process it takes to generate a change order, as well as provide some tools to assist in tracking the change orders and making sure all requirements are considered and met. The second part, will review the process of finaling and closing a project from the field through headquarters, and the requirements that were implemented in contracts in August of 2004.	Lisa Durbin Terry McDonald		Parlor D
	Construction participants			

## Thursday February 8, 2007

8:00- 9:50	<b>Conveniences Sorely Needed: A History of Montana's Highway Bridges-</b> this presentation will provide a brief, illustrated overview of the history of bridge construction in Montana from 1860 when John Mullan built the first bridges in the state up to the dawn of the Interstate era in 1956.	Jon Axline	Parlor E
	All participants		
	<b>Safe Living: Preventing &amp; Mitigating Workplace Violence-</b> the principles of Safe Living (Awareness, Confidence, Training, and Support Networks) are universal. This seminar is an integrated, solution-centered package, blending information-sharing, scenario-building, "hands-on" training, and participant-sharing.	Henry Shovic, PhD	Safe Living Seminars, LLC
	All participants		
9:00-9:50	<b>Guardrail Basics for Construction and Design-</b> review all types of guardrail (cable, w-beam, concrete barrier, and box beam) used in Montana. Also review terminal end sections and bridge approach sections. Review proper selection of guardrail for use in the field.	Scott Keller	Parlor C
	All participants		
	<b>Noise Modeling and Bridge Solutions on the Kalispell Bypass</b>	Mitch Stelling Jason Giard Kathy Harris Brian Werle Cora Helm	Stelling Engineering  Carter Burgess
	Preconstruction participants		
	<b>MDT's Library Program Overview-</b> explain the program in detail. How it works, the benefits and logistics. All topics defined with examples of each.	Lisa Autio	Bitterroot River Rms B & C
	All participants		
	<b>MDT Engineering Applications: Tools that Help the Design Become the Road-</b> items covered will include: features, hints and tricks for using the MDT Engineering Applications, current/planned enhancements, and solicitation of input for potential future enhancements.	Tim Boucher Riley Phelps	Missoula District Const. Conference Room
	Construction participants		
9:50 -10:00	BREAK	BREAK	
10:00-10:50	<b>Contract Time Determination-</b> the class will discuss a process to determine contract time. It will include a review of a typical project sequence, average production rates and factors that affect contract time.	Paul Ferry Lisa Durbin	Parlor D
	Preconstruction participants		
	<b>Bridges and Circles: Intersections with the Kalispell Bypass</b>	Mitch Stelling Jason Giard Kathy Harris Mary Stelling Dwane Kailey	Stelling Engineering
	Preconstruction participants		Parlor F

## Thursday February 8, 2007

10:00-10:50	<b>CAS Cards-</b> an Oracle application that provides easy access to high-level contract information from when the contract is awarded until the contract is closed. It is integrated with DSS, PPMS, Project Master Card System, and the new Claim Tracking System.	Margaret Brockhaus Jeff Kirby		Missoula District Const. Conference Room
	Construction participants			
10:00-11:50	<b>Weeksville West Blasting and Rock Bolting-</b> overview of the Weeksville West project and the blasting involved.	Larry Prinkki John Benda		Parlor A
	Construction participants			
	<b>Uses for Asphalt Cements and Emulsified Asphalts</b>	Al Hobbs	Montana Refining Company	Parlor B
	Construction participants			
	<b>Questions on Consultant Plans-</b> how to address questions that arise during construction on plans designed by Consultants.	Tim Conway Miki Lloyd Mark Cyr Jim Mitchell		Parlor C
	Construction participants			
	<b>Learn to Know, Understand and Love Your BMPs and Much More-</b> this session will cover construction BMPs, applications, what is working, what isn't working, dos, don'ts, and a discussion about BMPs and the general permit requirements.	Stacy Aguirre		Parlor E
	<b>Bonus:</b> There will be a "name that BMP and artist" component to this presentations; the presentation will familiarize you with the BMPs, and so study up on your vocal artist recognition skills.			
	All participants			
	<b>Safe Living: Self Protection for Those Working with the Public-</b> the principles of Safe Living (Awareness, Confidence, Training, and Support Networks) are universal. Dr. Shovic developed them using the life-skills of people who take risks for a living: firefighters, martial artists, soldiers, law enforcement officers, and medical personnel. Each seminar is an integrated, solution-centered package, blending information-sharing, scenario-building, "hands-on" training, and participant-sharing.	Henry Shovic, PhD	Safe Living Seminars, LLC	Parlor G
	All participants			
	<b>Federal Aid 101-</b> FHWA overview, Federal-Aid ineligible items, FHWA full oversight vs. non-full oversight.	Bob Seliskar Gene Kaufman Jeff Patten	FHWA FHWA FHWA	Bitterroot River Rms B & C
	All participants			
11:00- 11:50	<b>MicroStation Custom Programs for the MDT-</b> demonstrate the MDT macros and VBA's used to create plans for all the design areas.	Bob Cummings		Parlor D
	Preconstruction participants			

**Thursday February 8, 2007**

11:00-11:50	<b>Kalispell Bypass 28 to 76 in 1 Meeting: 1994-2006</b> Preconstruction participants	Mitch Stelling Jason Giard Kathy Harris Mary Stelling Dwane Kailey		Parlor F
<b>12:00 - 1:00 pm Lunch - on your own</b>				
1:00-1:50 <b>MDT ONLY</b>	<b>Impacts of ROW Fencing on Wildlife Movement</b> All participants	Larry Sickerson Pat Basting Deb Wambach		Parlor C
	<b>US 2 Havre Reconstruction Project: Construction Traffic Management-</b> this presentation will touch on new FHWA regulations on Work Zone Safety and Mobility, coordination program with local agencies and business owners, traffic phasing and management plan design, and specific construction constraints and challenges. All participants	John Pavsek	Morrison-Maierle	Parlor D
1:00-5:00 (4 hr. class) <b>MDT ONLY</b>	<b>High Performance Concrete (HPC): How It Impacts MDT</b> All participants	Mike Praul Lou Triandafilou	FHWA FHWA	Parlor A
1:00-2:50	<b>Cold In-place Recycling, Slurry Seals, and Microsurfacing-</b> cold in-place recycling, slurry seals, and microsurfacing are cost effective alternatives for scheduled and preventative maintenance projects. Cold in-place recycling (CIPR) is an alternative to asphalt overlay or mill and fill treatments on low-volume roads. CIPR has been used by the Maintenance Division, and will be used by the Engineering Division on a few projects next construction season. Slurry sealing is a more durable alternative to chip sealing. Micosurfacing is an alternative to plant mix seals or chip seals on high-volume roads and can also be used for rut filling. This presentation will given by experts from the industry. All participants	Chuck Valentine Pierre Peltier	Valentine Surfacing SemMaterials, L.P.	Parlor B
	<b>CTEP: The Process from Start to Finish-</b> Describe the federal laws and funding for CTEP. How Montana administers the program. How projects are developed, approved, programmed, designed, constructed, and closed out. All participants	Mike Whereley David C. Larson LeRoy Wosoba		Parlor E
	<b>Environmental Permitting: Preconstruction thru Construction</b> All participants	Bill Semmens Tom Gocksch Ray Studebaker		Parlor G

**Thursday February 8, 2007**

1:00-2:50	<b>Overview of the Claims Tracking System</b>	Scott Senger		Bitterroot River Rms B & C
	Construction participants			
	<b>MDT's New Quality Assurance Software Suite: Tools to Support the Quality Inspection Process-</b> this class will cover the process flow for using the new MDT QA Software Suite including contract file creation (selecting material items and personnel), contract file test specification creations (setting, editing, reviewing and locking material item tests and test specifications), and test data operations (test data entry, locking, and results reporting).	Tim Boucher Riley Phelps		Missoula District Const. Conference Room
Construction participants				
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	Preconstruction participants			
	2:00-2:50	<b>Truss Rehab Projects in Montana- Lessons Learned-</b> HDR Engineering performed rehab design for three historic truss bridges in Montana. Two of these were constructed before 1900 and one was constructed using Italian prisoners of war as labor. Restoring these bridges offered unique challenges including maintaining the historic character of the bridges, finding existing plans, finding physical properties of old members, heat shortening, straightening and repair, reconstruction of badly deteriorated built-up steel members, special jacking methods for light member trusses without end floor-beams, bearing solutings, removal and over coating of old lead based paint, attaching AASHTO rated rail to light timber decking, concrete repair, and encasement and replacement of concrete columns.	Brad Miller Dustin Hirose	HDR Engineering
All participants				
<b>Contract Time Determination-</b> the class will discuss a process to determine contract time. It will include a review of a typical project sequence, average production rates and factors that affect contract time.		Paul Ferry Lisa Durbin		Parlor D
Preconstruction participants				
2:50 - 3:00				
BREAK				
BREAK				

**Thursday February 8, 2007**

3:00-3:50	<p><b>Tips for Successful Consulting with MDT-</b> this session is intended to provide consultants with information and guidance on how to be successful working with MDT. It's the little things that make a difference, those unwritten rules and seldom talked about ways of doing business, that allow consultants to be successful in delivering projects and developing relationships with MDT. This session will be rather informal and will provide consultants ample opportunity to ask questions in a round-table type of format with the Consultant Design Engineer. While the topic of how to get work will be covered briefly, the focus of the session is geared towards working with MDT once under contract.</p>	Tom Martin	Bitterroot River Rms B & C
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*Recommended for design consultants*

3:00-5:00	<p><b>Lab Roundtable Discussion</b></p>	Matt Strizich Scott Barnes Kevin Christensen	Parlor B
<b>MDT ONLY</b>	<p>Construction participants</p>		
<b>MDT ONLY</b>	<p><b>Survey Issues Roundtable-</b> presentation on the Merits of Robotic Total Stations vs. RTK. A question &amp; answer session on any survey related issue.</p>	Dave Davis Ralph Jones John Hoechst Rob Mihalovich Mark Iwaniak Mark Roedel Mick Brown	Parlor C
	<p>All participants</p>		
	<p><b>Specifications: Cuss and Discuss-</b> this session will be an ongoing set of informal discussions on various specifications.</p>	Lisa Durbin Dan Smith Stefan Streeter	Parlor D
	<p>Construction participants</p>		
	<p><b>Conveniences Sorely Needed: A History of Montana's Highway Bridges-</b> this presentation will provide a brief, illustrated overview of the history of bridge construction in Montana from 1860 when John Mullan built the first bridges in the state up to the dawn of the Interstate era in 1956.</p>	Jon Axline	Parlor E
	<p>All participants</p>		
<b>MDT ONLY</b>	<p><b>MSE Walls-</b> topics included in this presentation are state-of-the-practice design tools and construction practices to for mechanically stabilized earth technology for routine use of cost-effective earth retention structures.</p>	Brian Collins	Parlor G
	<p>Construction participants</p>		
4:00-5:00	<p><b>The Municipal Storm Water Program: MDT's Commitments and Obligations-</b> the session will be an introduction to the new MS4 (Municipal Separate Storm Sewer System) program, how it affects the department, and what we need from everyone in order to comply.</p>	Stacy Hill	Parlor F
	<p>Preconstruction participants</p>		

**Thursday February 8, 2007**

4:00-5:00

**The Consultant's Role in Construction:  
Columbus South-** A case study of the Columbus –  
South Project and the involvement of the consultant  
designers in the construction process.

John Shoff  
Wade Irion  
Greg Gabel

HKM

Bitterroot  
River Rms  
B & C

Construction participants

**Montana Department of Transportation**

